

# Chemical Age

VOL. 6 NO. 26

25 July 1959

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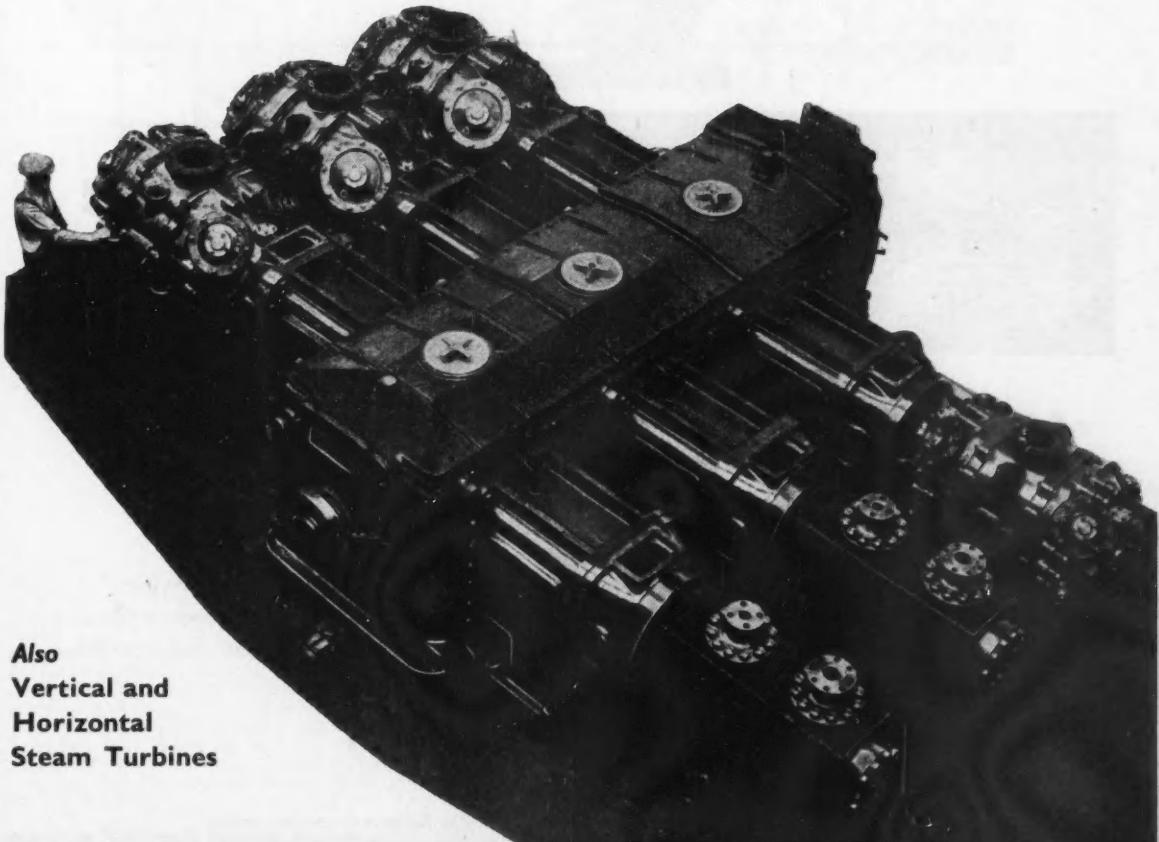
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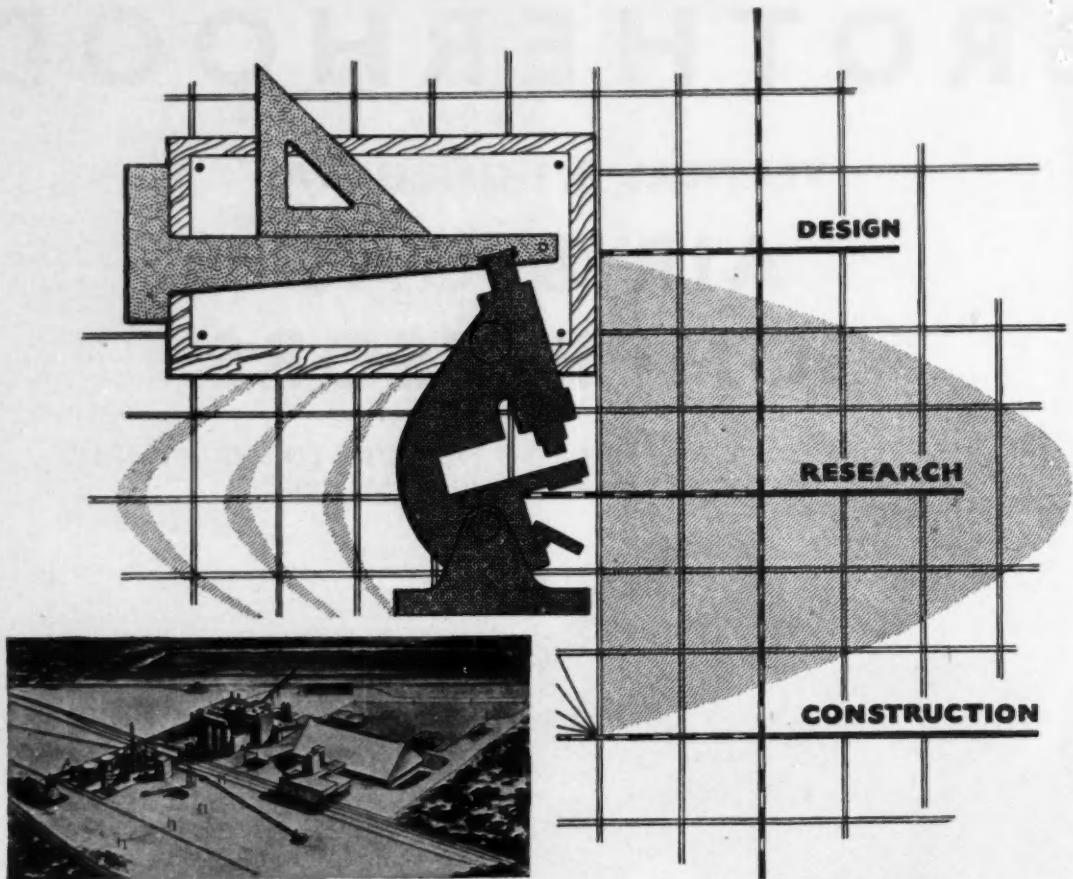
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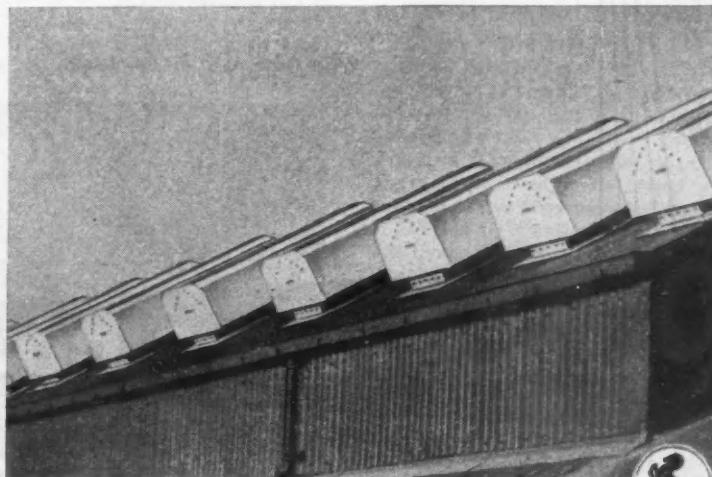


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**Viewpoint**

It would be difficult, if not impossible, at this stage to assess the contribution that Sir Alexander Fleck has made both to the chemical industry and science in general. One thing is certain. He has shown that the scientist has a vital role to play in the conduct of industrial affairs. No doubt his early background of chemistry has contributed to his outstanding ability to comprehend and analyse the problems of the industry.

His biographers in future years will doubtless find that his service to Government has been no less valuable than his activities in industry and science.

This eminent Scot, who is in fact the third Glaswegian in succession to chair I.C.I., has by his modesty and ability endeared himself to a host of friends at home and abroad—in Government, industry, science, industry and commerce. He will be missed from the I.C.I. scene, but it seems unlikely that a man of his vigour and enthusiasm will relinquish his great interest in the furtherance of relations between science and industry and in humanising the sciences.

His successor, while so dissimilar in many respects, has much in common with Sir Alexander. Neither resemble in the slightest the popular conception of the business tycoon. Both could have pursued careers outside industry that would have brought them distinction and honour. Mr. Chambers accepted an invitation to join the I.C.I. board in 1947, becoming finance director the following year and a deputy chairman in 1952.

154 FLEET STREET, LONDON, E.C.4. Tel.: Fleet Street 3232

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4 July 1959

**Sir Alexander Fleck to Retire**

**SIR ALEXANDER FLECK, K.B.E., F.R.S.**, the scientist, is to retire from the chairmanship and board of Imperial Chemical Industries Ltd. on 29 February, 1960. He will be succeeded by Mr. Stanley Paul Chambers, C.B., taxation and finance expert.

Sir Alexander, who will be 70 in November, will on his retirement have been actively associated with the company and its predecessors for more than 44 years. Mr. Chambers accepted an invitation to join the I.C.I. board in 1947, becoming finance director the following year and a deputy chairman in 1952.

Before joining one of I.C.I.'s predecessors in 1916 when the British chemical industry was expanding rapidly, Sir Alexander had already gained a scientific reputation in the field of radiochemistry. It was on the basis of this early work that he was elected a Fellow of the Royal Society a few years ago.

Sir Alexander left school at the age of 14 and started his working life as a 'lab' boy at Glasgow University under Professor Soddy. Three years later his determination to follow a

scientific training enabling him to become a full-time student. He gained a chemistry degree at the age of 22 and an appointment to the university teaching staff as an assistant in the physical chemistry department. By 1913 he had his own research laboratory as physical chemist to the Glasgow and West of Scotland Radium Committee. His work there was concerned with radiological research on cancer. He gained his D.Sc. for a thesis based on 'Some chapters in the chemistry of the radio elements'.

He joined the Castner-Kellner Alkali Co., which in 1920 became a subsidiary of Brunner, Mond. The I.C.I. merger of 1926 gave Sir Alexander's talents wider scope and by 1931 he had risen to be managing director of the General Chemicals Division.

He progressed to I.C.I. main board in 1944 as director responsible for Billingham Division and for Central Agricultural Control. Wilton was added to his duties in 1946. From 1951 until his appointment as chairman in June 1953 he was a deputy chairman.

Mr. S. P. Chambers, who has been described as 'a youthful 55', was London born. He was educated at City of London School and the London School of Economics. After taking a degree in economics he joined the Inland Revenue Department at the age of 23. Like Sir Alexander, his progress was rapid. For five of his 20 years in Whitehall, Mr. Chambers was a Commissioner of the Board of Inland Revenue, joining the board in 1942, the year he was created a C.B. He visited Washington in 1944 to negotiate the double taxation agreement and at the end of the war became chief of the Finance Division of the U.K. section, Allied Control Commission in Germany. It is said that the 'Pay-as-you-earn' tax scheme was Mr. Chambers's idea.



**Sir Alexander Fleck receiving a silver salver from Mr. S. P. Chambers to mark his 40 years service with I.C.I.**

**I.C.I. Closing An Explosives Factory**

Employees at the Nobel division factory of Imperial Chemical Industries at Haswell, County Durham, have been told that the manufacture of industrial explosives will end there in the first six months of next year. The site will be kept as a storage depot giving employment to about 20 people, compared with more than 180 who are employed there now.

**Courtauld's Engineers in Moscow**

Nine executive engineers of Courtaulds Ltd. have left for Moscow where they will meet Russian technicians to discuss the £15 million synthetic fibre plant Courtaulds are to build under contract for the U.S.S.R.

## A.B.P. COMPLETE FINAL STAGE OF RECONSTRUCTION PROGRAMME

**W**ITH the final transfer of the fabricating and machining facilities, Ashmore, Benson, Pease and Co., a member of the Power-Gas group, have completed a programme of reconstruction the first stage of which came into production in 1951.

The new works have been built on a site of 125 acres half a mile from the Parkfield Works. The old site had been in use for over 80 years, the works being extended several times. In 1949 it was decided to build a new works to meet modern needs. The new unit is known as the South Works.

In planning the new Works it was decided that each production department should be provided with twice the floor area it then occupied with room for redoubling. Similarly room was to be allowed for the quadrupling of office accommodation. Above all, flexibility was to be the keynote in order to be ready for any developments.

The first stage of the new constructional shop consisted of 132,000 sq.ft. of covered floor area with ancillary services and buildings. It came into production in the summer of 1951. Since that time that shop has been

extended to give a total floor area of 200,000 sq.ft.

The next stage of extension consisted of the construction of a structural bay, adjacent to the constructional department, which has added 27,200 sq.ft. to the shop and provided much improved facilities for the fabrication of structural steelwork as distinct from the manipulation of plate in the main constructional shop.

The most recent stage of development is the completion of the machine and fitting shops under one roof, providing a working area of 160,200 sq.ft.

To date about £3,000,000 has been spent on the new works, though only a small proportion of the 125-acre site has yet been used.

In the ten years since the original plans were drawn up the company's turnover has been quadrupled, while its staff has been doubled. The weight of the biggest job produced has trebled and a great many materials have been enlisted which had not even been developed during the planning days of 1948.

The general foundry still remains at the Parkfield Works.

### Elga Move Ion Exchange Division to Bucks

**G**RWOTH of the operations of Elga Products Ltd's. Ion Exchange Division has led to operations being moved to a new factory at Lane End, Bucks., where headquarters, research and service regeneration are now established. The  $\frac{1}{2}$ -acre site is said to contain Europe's largest production unit specialising in the design and manufacture of deionisation equipment.

Equipment includes a fully automatic regeneration plant; an 'Automaton' activating the ion exchange resins employed in the units. This process, with quality control, is independent of personal action. The plant was designed by Mr. E. W. Harmer, Elga's Chief development engineer and was built by his staff.

Intrinsic water of the order of 16 megohm-cm. is now produced at tap speed by the deioniser designed by Mr. Harmer. Equipment cost is low—some 1,000 gall. are produced for about 10s.

**New Uses.** The company add that for new research laboratories, architects are now specifying a 'third tap'; a simple cartridge column may feed any number of benches with purified water at the turn of the tap.

A further major future use for ion exchange resins is seen by Chemical Separations Corp., Oak Ridge, Tenn., U.S., who believe that they may be used to produce alkalis. They have already used continuous anion exchange to produce 2.3M KOH from NaOH and KCl, and NaOH from Ca(OH)<sub>2</sub> and NaCl. While products do not equal the quality and concentration of commercial alkalis, they might satisfy some needs and cost less. ('Chem. Eng.', 15 June, p. 76.)

Ion exchange might regenerate KOH for recycle, by using waste salt from a chemical process. Also by using readily available lime and salt, it might be used to make low-cost NaOH for leaching ore. The company believe that the process, success of which hinges on use of countercurrent continuous ion exchange in a Higgins contactor, is both workable and competitive.

### I.C.I. Partner Alcoa in New U.K. Aluminium Venture

**W**ROUGHT aluminium products are to be produced in the U.K. by a new company—Imperial Aluminium Co.—in which Imperial Chemical Industries Ltd. will hold 51% of the capital and the Aluminium Co. of America (Alcoa) 49%. The company is to take over I.C.I.'s aluminium plant at Waunarlwyd near Swansea, but will not control the production of wrought titanium there, which will continue under I.C.I. Metals Division.

I.C.I. will appoint three of the five directors and Alcoa two. I.C.I. nominees include Dr. James Taylor, chairman, who is also an I.C.I. main board director, and Mr. Berkeley Villiers, managing director, now a Metals Division director.

Alcoa, the world's largest producer of primary aluminium and wrought aluminium products, will supply a 'handful' of technical staff with the aim of improving productive efficiency and technological know-how. Capacity at Waunarlwyd is between 20-30,000 tons a year, depending on the types of product produced; this represents about 8% or 9% of the present U.K. market demand which is estimated at about 300,000 tons of wrought aluminium a year.

The U.K. industry is at present working below capacity, but the new partnership is said to indicate the faith of both companies in the continuing expansion in the growth of aluminium markets and their intention to develop further the uses of aluminium, particularly in the U.K. and the Commonwealth. Present annual consumption of aluminium per head of population in the U.S. is 23 lb. against about 10 lb. in the U.K.

Announcing this venture last week, Mr. S. P. Chambers, deputy-chairman of I.C.I., indicated that investment would be about £10 million. Initially the new company will make use of I.C.I.'s world-wide sales organisation.

### Fisons' New Widnes Plant

Lord Kenyon on 23 June opened the new ammonium nitrate handling plant at the works of Fisons Ltd., Widnes. The plant uses products from the firm's new nitrogen factory in Essex.

### Fertiliser Report Due Soon

The President of the Board of Trade expects to receive the Monopolies Commission report on chemical fertilisers before the end of July. This was stated in the House of Commons last week.

# WARREN SPRING LAB. OPENED BY LORD HAILSHAM

**A** NEW era in the history of the Department of Scientific and Industrial Research began with the inauguration of the Warren Spring Laboratory at Stevenage, Herts., which was officially opened by the Lord President of the Council, Lord Hailsham, on Monday, 29 June.

In setting up the laboratory the Research Council for the department expressed their conviction that when necessary the department's research stations should change in function and objective to meet the needs of changing situations. The function of the new laboratory is 'to carry out process research and development over a wide field not limited to particular areas of technology.'

As the council considered that the Fuel Research Station had largely fulfilled its aims, and present needs were satisfactorily catered for by researches going on elsewhere, they decided to close the station and transfer the staff to the new laboratory. The name of the new laboratory, Warren Spring, from a lane that used to cross the site, was given to the laboratory to avoid any impression that the Fuel Research Station was being continued at Stevenage. The council also wished to avoid a title that might appear to limit the field of activity.

Only two programmes carried out at the Fuel Research Station, research on the abatement of atmospheric pollution and on the synthesis of oils and chemicals, by the Fischer-Tropsch process, have been transferred to Warren Spring.

A demand for research in mineral processing and work on a pilot scale in various fields is being met. The work on chemical engineering carried out at the National Chemical Laboratory has also been transferred to Warren Spring.

Pilot-scale laboratories, three in number, are arranged as wings to the main laboratory, to permit direct personnel communication between pilot and small-scale laboratories. To the south of the main and pilot-scale laboratories are the workshops, garages, storage facilities, boilerhouse, gas producer plant and electrical substation.

All these buildings are capable of up to 100% extension laterally; in addition the main and pilot-scale laboratories could be duplicated to the south of the workshop group.

The only solid internal walls are those of the corridor and secondary staircases, all other partitioning being of light prefabricated construction for easy adaptability.

The total cost of the establishment, including fittings, is approximately £620,000.

## Synthesis Gas Plant by Humglas

THE synthesis gas plant to provide raw material for research and development work on the Fischer-Tropsch process at the Warren Spring laboratory has been built by Humphreys and Glasgow Ltd., of London.

Gas mixtures produced in the plant simulate the type of gas which would be produced by the complete gasification of low-grade coal with oxygen and steam.

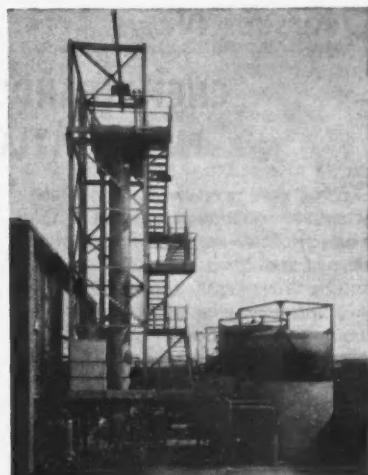
The installation will have a normal output of 72,000 cubic feet per day, and was designed for a maximum daily output of 120,000 cubic feet.

The synthesis gas generation is carried out in a conventional water gas plant, which has been adapted to allow carbon dioxide and steam to be used together during the 'make' part of the cycle.

After the gas is cooled, hydrogen sulphide and carbon dioxide are removed, by Gastechnik pelleted iron oxide purifiers and by scrubbing with caustic soda respectively. (See 'Chemical Age' 20 June 1959, p. 1031.)

Four 1,000 cubic feet water-sealed gas holders are provided, the first to act as a compensating holder for the cyclic water gas plant, and the other three as balance holders for the gas before compression.

After compression to about 15 atmospheres, the gas is delivered to an activated-carbon organic sulphur removal unit. Completely purified gas is returned to the compressor for further compression and finally dis-



Hydrogen sulphide and carbon dioxide removal section and caustic soda scrubbing tower of the synthesis gas plant.

charged to two high pressure storage vessels. From here it is delivered to the small and pilot-scale synthesis plants.

## C.A. 'Who's Who'

In the past few weeks some 5,000 'Who's Who' forms have been sent to existing entrants in the *Chemical Age Directory and Who's Who* and to prospective new entrants for the 1960 edition. Our aim is to make this feature as comprehensive as possible and if any of our readers who are qualified for inclusion have not received a form, they can obtain one by applying to the Editor, *Chemical Age*, 154 Fleet Street, London, E.C.4. Entry in the 'Who's Who' involves no charge and no obligation.

In addition to including about 2,000 new 'Who's Who' entries, the 1960 edition of the *Chemical Age Directory and Who's Who* will also list an additional 60 trade and professional associations. The Buyer's Guide feature is also being greatly extended and is open to all companies in the chemical and supplying trades. The list of headings has been completely revised by a panel of trade experts.

A general view of the new laboratory.



## Overseas News

### CHEMSTRAND'S THREE NEW MAJOR NYLON PROJECTS

Three new projects—a nylon plant, a nylon development centre and a research centre—are announced by the Chemstrand Corp. U.S. who are celebrating their tenth anniversary. First stage of the nylon plant, to be built at Greenwood, South Carolina, will provide capacity for an additional 10 million lb. of yarn and is expected to be available by the end of next year. The new nylon development centre at Pensacola, Florida, will concentrate on the development of properties of nylon for special uses, new nylon fibre products and process innovations to produce new types of fibre. The centre will be completed early in 1960.

#### Canadian Fertiliser Plant

ERCO of Canada have acquired a phosphatic fertiliser plant at Port Maitland, Ont., from Dominion Fertilizers.

#### Fertiliser Plant Changes Hands

La Toscana Azota, producers of nitrogenous fertilisers at Figlini, Valdarno, Tuscany, have been acquired by ENI, who, it is stated will adapt the plants for other purposes.

#### Devon Palmer's Sulphur Plant

Devon Palmer Oils of Calgary have been granted a long term loan of up to \$3.5 million from a New York bank to help to finance the company's share of a \$9.5 million sulphur-gas project in the nearby Okotoks gas field.

The sulphur-gas project is due on stream before the end of June. When in full operation the facilities will yield 12.5 million cu.ft. of gas a day and 370 long tons of sulphur a day.

#### Soviet Furfurol Plant

##### Starting Up

Production at the Soviet Union's first Furfurol plant—at the oil refinery at Krasnovodsk on the Caspian Sea—is due to start during July. Among its products will be good-quality soap.

#### New Process Recovers Sulphur from Refinery Gases

Recovery of sulphur from refinery gases by a new process developed by Atlantic Refining Co., U.S., was the subject of a paper at the Fifth World Petroleum Congress in New York. Process uses a basic aqueous solution of a multivalent ion (e.g. iron) with a chelating agent to absorb hydrogen sulphide and oxidise it to sulphur.

Iron is reoxidised by air, either concurrently or separately, to make a continuous operation. Sulphur is formed as a finely divided solid.

The new Atlantic process is said to show potential advantages in control and efficiency over the main commercial method—the Claus process. It might be extended to remove hydrogen sulphide from hydrocarbon gas streams while at the same time converting it to sulphur.

#### Dutch Sulphuric Plant will Produce 120,000 Tons a Year

Albatros Superfosfaatfabrieken N.V., Utrecht have issued ordinary shares amounting to 5,510,000 guilders at 100%. The proceeds are intended to finance the company's participation in the establishment of Albatros Zwavelzuur-en Chemische Fabrieken N.V. and of a new unit at the Pernis factory for the manufacture of nitrophosphate fertilisers. Albatros Zwavelzuur, a joint venture with Cyprus Mines Corp., Los Angeles, will erect at Pernis a sulphuric acid plant, which based on pyrites, will have a capacity of 120,000 tons of 100% sulphuric acid a year.

#### Dow Chemical Open South African Office

Dow Chemical International Ltd. S.A., have opened a sales office in Johannesburg, to serve Africa south of the Sahara.

#### Growth of Australian Plastics Industry

Sharp rises in the profit of Monsanto Chemicals (Australia) Ltd., in recent years reflect the growth of the Australian plastics industry, which depends on the Monsanto group for many of its basic raw materials. The annual value of production is estimated at between £A27 million and £A30 million, and current capital investment in plants totals £A10 million. The industry employs about 8,000 people.

Plastics manufacturing began in Australia in 1917. Current output of all types of plastics materials totals about 13,000 tons per annum. In addition, another 3,000 tons of phenol-formaldehyde, urea-formaldehyde and melamine-formaldehyde are produced for the paint industry, and for laminating bonding and for the manufacture of adhesives.

Total plant capacity for all materials is about 30,000 tons a year. Nevertheless, the demands of Australia's expanding plastics industry are such as to require considerable imports of raw materials. Thus, in 1956-57, 12,400 tons of resins and moulding powders were imported valued at £A5,300,000. There is also an extensive import trade in plastics manufactures, mainly from the U.K., Germany and Italy.

#### South African Uranium Figures Made Known

The value of South Africa's exports of prescribed materials (mainly uranium oxide) under the Atomic Energy Act amounted to £12,500,000 for the first quarter of this year, as against £14,400,000 for the same period of 1958. Figures relating to prices, costs and profits per pound of uranium oxide for the various individual producers have been made available for the first time. For the first quarter of 1959, the average production cost per lb. for all producers was 42s. and the price obtained per lb. 86s. 10d.

#### Union Carbide Plan Ethylene Oxide Unit in Sicily

Mr. M. A. Dial, president of Union Carbide Corp., U.S., has stated that plans are being studied for the construction in Italy of a plant to produce ethylene oxide and its derivatives. This programme is to be carried out by Celene S.p.A., a concern set up in 1957 jointly by Union Carbide and Societa' Edison, Milan.

The new plant is to be erected close to the polythene plants already operated by Celene at Priolo, Sicily. It is to go on stream by mid-1960 and its initial output is scheduled at 12,000 tonnes a year.

#### Expansion at Porto Empedocle

Montecatini are adding a new department to the fertiliser factory at Porto Empedocle, Sicily. The new department will process potassium salts recently discovered in Sicily and will help to increase the company's range of compound fertilisers.

#### Soviet Plans for 2,500-mile Oil Pipeline

Plans have been completed for the pipeline, 2,500 miles long, which is to carry oil from the Soviet Union to Poland, Czechoslovakia, Hungary and East Germany. The pipeline will start in the oilfields of the Volga, cross almost the whole of European Russia and divide into two branches. The northern branch will go to Poland and East Germany. The southern to Hungary and Czechoslovakia. It is estimated that the pipeline will carry enough oil to meet the needs of all four countries. Gas from the oil refineries will serve their chemical industries.

## TRADE NOTES

### New Telephone Number

The telephone number of Solus-Schall Ltd., 15-18 Clipstone Street, London, W.1, has been changed to Museum 5080 (12 lines).

### New Flowrator Catalogue

A new 80-page catalogue is now available giving comprehensive information about the new range of Flowrators. Flow calibration curves and conversion formulae, enabling the flow of any liquid through any Flowrator to be determined, occupy an eight-page section; this is followed by recommended materials of construction for Flowrators for use with corrosive fluids. The catalogue is available from the Sales Dept., Fischer and Porter Ltd., Salterbeck Trading Estate, Workington, Cumberland.

### Unit Dust Collector Servicing Scheme

Dallow Lambert and Co. Ltd., Leicester, have introduced a unit dust collector servicing scheme. A service engineer visits at six-monthly intervals, or at other agreed dates.

### Lodge-Cottrell Ltd.

Lodge-Cottrell Ltd. continue to operate as a separate company after the purchase of their share capital by Simon Carves Ltd., and have retained all their staff and their three full-time directors.

### Guide to Canada

A booklet, 'A Guide to Marketing in Canada', has been published by Crawfords Advertising Service, Toronto, in the belief that many U.K. firms, realising the economic significance of the St. Lawrence Seaway, are now seriously considering establishing a position in Canada, or expanding their interests there. Copies are available from: W. S. Crawford Ltd., Overseas Division, 16 Gate Street, London, W.C.2.

### Southern Instruments

The recently formed Analytical Instruments Dept., of Southern Instruments Ltd., Camberley, has appointed A. R. Bolton and Co., Edinburgh, as its sole distributors for Scotland.

### New B.D.H. Entries

New entries to the catalogue of the B.D.H. Laboratories Chemicals Division, Poole, are: 4-methyl-nioxime, a reagent for nickel and palladium; and methyl thymol blue complexone which in acid solution can be used for the titration of bismuth, thorium, lead, zinc, cadmium, lanthanum and scandium, and in strongly alkaline solution for the alkali earth metals.

### Nitrate of Soda

Nitrate Corporation of Chile announce that until further notice the

price for refined granulated Chilean nitrate of soda, over 98%, in lots of 6 tons or more will be £29 net per ton of 2240 lb. gross weight. Agricultural prices for 1959-60 include: July—nitrate of soda (16% N), £27 5s.; potash nitrate (15% N and 10% K), £30 5s. per ton.

### Liquid Seed Dressings

Shell Chemical Co. have introduced new liquid seed dressings, the first time they have been used commercially in the U.K. Two dressings are available: Panogen, a mercury-based fungicidal dressing, and Astex, a new insecticidal dressing for control of wireworm and other soil pests, which has been developed by Shell.

### Disposable Polythene Gloves

Mark Anthony and Sons Ltd., Chalk Hill, Watford, Herts, will shortly start the production of women's gloves in 150 gauge polythene and men's gloves in various gauges. Advantage of this light-weight

glove is that each finger can be used separately with minimum loss of touch. Price is economic enough to make the gloves disposable, although with care they can be reused.

### Cyanuric Acid

Cyanuric acid, produced at Cyanamid's Willow Island, West Virginia, plant, is now available in commercial quantities from Cyanamid of Great Britain Ltd., Bush House, London, W.C.2. Uses include production of di- and trichloroisocyanuric acid for bleaches, sanitisers and disinfectants, while potential uses are seen in the herbicidal action of cyanuric acid, various types of resins, determination of traces of various cations colorimetrically, and in preparing dyestuffs, possibly through reaction of cyanuric acid with substituted diazonium salts.

### Cellophane Film

MXXT/A Cellophane cellulose film, coated with a base film with a special vinylidene chloride copolymer applied as an aqueous dispersion, is described in a new brochure available from British Cellophane Ltd., 9 Henrietta Place, London, W.1.

## Commercial News

### Laporte Industries

The current year has opened with a firmer tone than prevailed 12 months ago so far as the U.K. and Australian companies are concerned, states Mr. L. P. O'Brien, chairman of Laporte Industries Ltd. He believes that a year from now shareholders will receive a satisfactory report and statement.

Additional normal replacement capital expenditure will be incurred in the current year but the directors believe that unless some unforeseen circumstances arise there should be no need to borrow or to raise additional capital in 1959-60 after having met all expected liabilities and dividends. Outstanding contracts for group capital expenditure amount to about £280,000 (£1,090,000).

### Johnson, Matthey

Although Johnson, Matthey Ltd. experienced a fall of £106,210 in group net profits, the directors are giving shareholders 2% more by way of dividend and are proposing a one-for-two scrip issue. The final Ordinary dividend is brought up to 9% from 7%, making a total of 12%. Group profits after all charges, including tax of £627,627 (£789,853), amounted to £828,282, compared with £934,492.

### Crookes Laboratories

Net profit of Crookes Laboratories for the year ended 31 March was £26,542 (£33,275). Dividend of 12½% has been declared on double capital (same equivalent).

### A. Boake Roberts

Group trading profit of £120,126 before tax is reported by the chairman of A. Boake Roberts (Holding) Ltd., Mr. F. G. Pentecost. Final results, he says, are better than forecast, but compare badly with the previous year's £352,104. After deducting tax and profits attributable to minority interests profit is £80,374 (£249,162). With a final of 10%, the dividend is maintained at 15%. This, the chairman says, reflects confidence in the future of the business. Intensified competition resulted in major price reductions, and this with other factors lowered the total value of sales by 8%. Operating expenses continued to rise and the plant at Widnes was not in full production and a high commissioning cost continued.

### Vitamins Ltd.

Vitamins Ltd. have received a share exchange offer worth about £3.5 million from United Molasses Ltd. for the £569,000 ordinary capital. Terms offered are six U.M. 10s. ordinary units for every seven Vitamins 5s. ordinary units.

### British Visqueen

I.C.I. subsidiary, British Visqueen Ltd., which manufacture Visqueen polythene film, have purchased the share capital of Spesco Developments Ltd., Chertsey, Surrey. Spesco make bags from Visqueen polythene film.

*Cartridges  
and  
Candles*



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Menrow multi-purpose treatment units are equipped with filter cartridge units or candle units, according to the duties they are called upon to perform. Where cartridge units are used, all surfaces coming into contact with the liquids being filtered are coated with Araldite 985E surface coating resin, to prevent formation of metallic salts and consequent contamination. In the candle sets, the dehydration candles are also coated with Araldite which is highly repellent to water and therefore assists separation. The oil passes through the coated candles while the water remains on the surface. Araldite epoxy resin coatings are extremely tough and flexible, unaffected by moisture and chemical attack, and provide full protection against abrasion and corrosion.

*Araldite epoxy resins are used*

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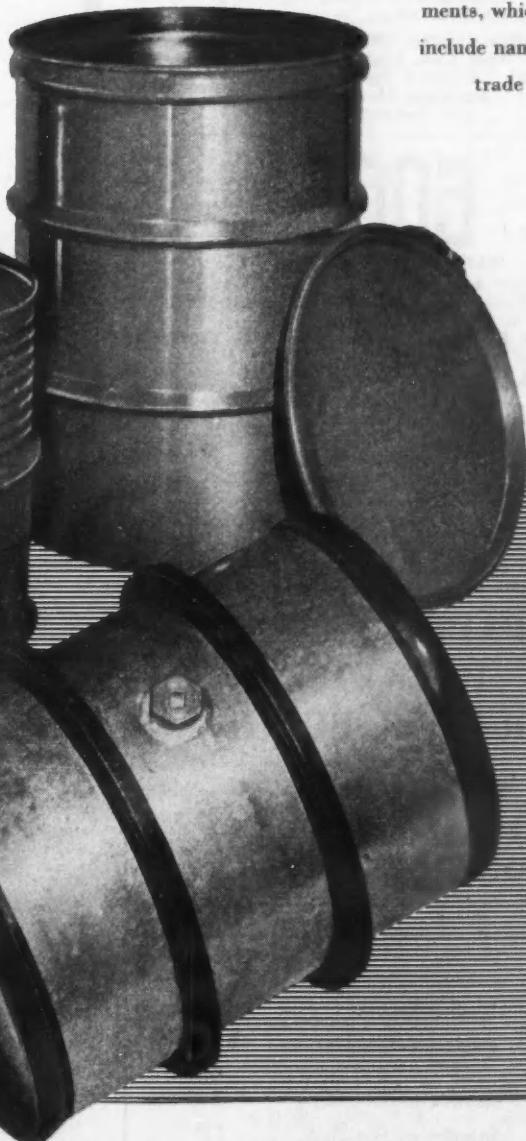
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The printing trade dispute, in which 'Chemical Age' is not directly involved, continues to preclude normal publication. This emergency edition summarises the news of the week.

COURTAULDS' EXPANSION. Expansion of Courtaulds Ltd's petro-chemical plant at Spalding is well on the way to completion, reports Sir John Hanbury-Williams, chairman, in his annual report. It was announced last year that a 40% expansion was planned at this plant. A decision has also been taken to double capacity of the company's vinyl acetate plant and this is in hand. Plans for the production of other chemicals are well advanced and the directors foresee a steady increase in the company's business in chemicals. The new plant for Courtelle (acrylic staple) at Grimsby should be in full production by the end of this year; capacity is 10 m. lb. per year. Group Developments, formed in 1958 to further Courtaulds' policy of diversification, have acquired the capital of four companies in the paint and packaging industries at a cost of about £2.3m.; further acquisitions are expected.

CANADIAN TARIFF CHANGES. Change in the system of classifying chemical imports to Canada to the Brussels Nomenclature is to be recommended by a special chemical industry committee headed by Mr. J. A. Davis. Mr. Davis recently told the Economics Subject Division of the Chemical Institute of Canada that the committee was set up following a request of the Canadian Finance Minister to the Tariff Board. The committee expects to be able to start public hearings before the Tariff Board early in 1960. The existing tariff system was last overhauled in 1906.

NEW HYDROREFINING PLANT. A new £450,000 hydrorefining plant that will produce mainly low sulphur motor benzole and a new range of tar solvents has come into operation at the Cadeshead Works of Lancashire Tar Distillers. Said to be the first of its type in the U.K., the plant was designed by and purchased from Lurgi, of Frankfurt; civil engineering and construction were carried out by Simon-Carves. Some 100 tons of crude benzole and tar naphtha can be processed daily. The tar solvents, in the new Purosol range, have very low sulphur contents, colour stability, sweet smell and low bromine number.

UREA PLANT FOR SUNOLIN. Construction of an \$8m. urea plant, a joint venture of Sun Oil, Philadelphia, and Olin Mathieson, New York, was started on 22 June at North Claymont, Del., U.S. At the same time a plant model valued at \$30,000 was unveiled by officials of SunOlin Chemical Co., the company formed to produce urea. Scheduled for completion early next spring, the plant will produce 73,000 tons a year by the Montecatini process. It will also produce about 10 m. cu. ft. of hydrogen to be used by Sun Oil to produce ammonia and for other refining purposes. The model, developed by N. W. Kellogg Co. who will also construct the plant, is complete in every detail. Daily material needs include 120 tons of ammonia, from Sun Oil's Marcus Hook, Pa., refinery, 150 tons of carbon dioxide, from SunOlin's steam turbine methane reformer.

PEOPLE IN THE NEWS.

Steering committee of the new D.S.I.R. Warren Spring laboratory is: Sir Harry Jephcott, chairman; Sir Harry Melville, F.R.S., secretary of D.S.I.R.; Dr. R. Holroyd, a deputy chairman ICI; D.A. Oliver, director of research, BSCA Group Research Centre; S.H. Clarke, director of the laboratory. Senior staff at the laboratory include: Dr. C.C. Hall, deputy director; process development division: A.H. Taylor, acting head of division, Dr. D. Gall and Dr. D.J. Gibson; atmospheric pollution: Dr. S.R. Craxford, head of division; mineral processing: C.C. Ackroyd, acting head of division; chemical engineering: Dr. P.H. Calderbank, head of division; physical and chemical services: W.F.D. Shaw, head of division, A.V. Aubrey and L.J. Edgcombe; engineering services: Dr. A. Fitton, acting head of division.

Dr. A.R. Peacocke has been appointed lecturer in chemistry at St. Peter's Hall, Oxford.

Mr. J.D. Gilbert, M.Sc., F.R.I.C., has resigned his post as chief development chemist, Newton, Chambers and Co. Ltd., Sheffield, to open a consulting practice specialising in industrial colloids at 19 Leaside Way, Bassett Green, Southampton, Telephone Southampton 55514.

In an enlargement of the executive staff of Dow Chemical International Ltd. S.A. Mr. Max Key, plastics production manager of the parent company's Midland Division, has been appointed operations vice-president. Mr. A.M. Griswold, vice-president of Dow International, and Mr. E. K. Stilbert, manager of coating materials for the plastics department of the parent company, become group vice-presidents. Dow International operates throughout the world with the exception of Canada and Mexico. Headquarters are Midland, Mich.

COMMERCIAL NEWS.

BRITISH VISQUEEN. I.C.I. subsidiary British Visqueen Ltd., who make Visqueen polythene film, have purchased the share capital of Spesco Developments Ltd., Chertsey, Surrey, who make bags from Visqueen.

BRITISH GLUES. Group profit of British Glues and Chemicals for the year ended 31 March was £331,407 (£743,094). Net profit, however, was higher at £365,407 (£351,094). A final dividend of 17½% is declared, making 22½% (20%).

YORKSHIRE DYEWARE. Group net profit of Yorkshire Dyeware and Chemical Co. Ltd. to 31 March 1959 was £162,188 (£133,488). A distribution of 20% (same) is being made.

DRI-SIL IN HOLLAND. Dri-Sil Nederland has been formed by Midland Silicones Ltd. and their agents in Holland to promote the Dri-Sil finish for textiles.

CONSTRUCTION SLOWED. Because of a slowing-down in the rate of construction at the Wilton works of I.C.I., about 70 members of the constructional staff are to be dispensed with by the end of the year.

U.S. TIE-UP. Negotiations are taking place between Head Wrightson and Arthur G. McKee, constructional engineers, Cleveland, Ohio, for collaboration in the field of petroleum and chemical engineering.

PEOPLE (Continued from Column 1.)

Mr. W.F. Mitchell has been appointed to the boards of Shell International Chemical Co. and Bataafse Internationale Chemie N.V.

Mr. S. Black, sales development chemical engineer, British Aluminium Co. Ltd., has resigned to become senior sales engineer with the A.P.V. Co. Ltd., Crawley.

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Entry requirements for both courses are a degree in Chemistry or equivalent (G.R.I.C. or H.N.C.) The Department of Scientific and Industrial Research has accepted these courses as suitable for the tenure of its Advanced Course Studentships. Further details can be obtained from the Registrar, Bradford Institute of Technology, Bradford 7, to whom applications should be sent as soon as possible.

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DEPARTMENT OF CHEMISTRY.

A course of 20 postgraduate lectures on "Biochemistry" (to be arranged in four groups) will be given by Dr. J.W. Neil and Dr. B.R. Rabin on Mondays 7.15 to

8.30 p.m. during the period 5 October 1959 to 21 March 1960. The course (as in previous years) is designed for students who possess a knowledge of Chemistry to degree standard. Fee: £2 for whole course or 10/- for each group. A leaflet giving details is obtainable from the secretary.

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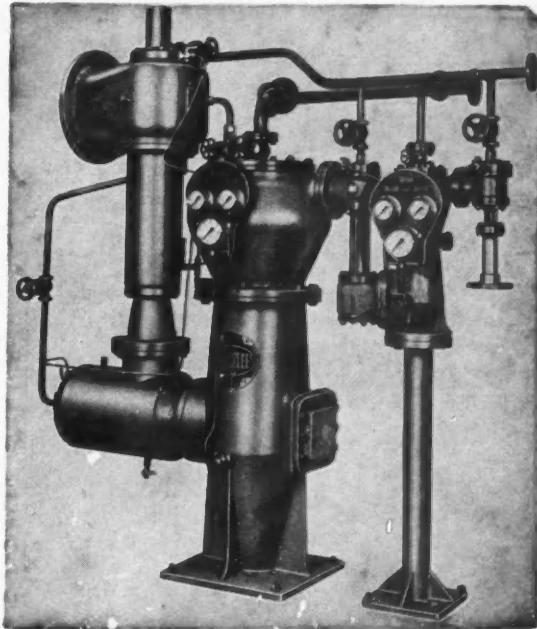
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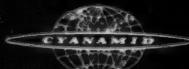
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